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| 10/552,228 | 10/06/2005 | Jorg Peetz | DE 030108 | 6701 |
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| EXAMINER | | | | |
| LIU, BEN H | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,228

Applicant(s)

PEETZ ET AL.

Examiner

BEN H. LIU

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is in response to an amendment/response filed on May 19th, 2008.
2. No claims have been amended.
3. No claims have been cancelled.
4. No claims have been added.
5. Claims 1-11 are currently pending.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-2, 5-6, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekl et al. (U.S. Patent 6,816,502) in view of Shimizu (U.S. Patent Application Publication 2003/0125087).

For claims 1, 5, 9, and 11, Ekl et al. disclose a method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal, wherein the first subnet operates on a first frequency channel and the second subnet operates on a second frequency channel (*see column 2 lines 1-5, which recite an access point API00 that communicates with at least two sets of users wherein the different sets of users operate on different frequency channels*), the method comprising the steps of: switching an operation of the bridge terminal between an operation in the first subnet on the first frequency channel and an operation in the second subnet on the second frequency channel; wherein the bridge terminal is unavailable for the first subnet when it is operated in the second subnet; wherein the bridge terminal is unavailable for the second subnet when it is operated in the first subnet (*see figure 2*,

which recite the access point communicating exclusively with one set of users before communicating exclusively with another set of users).

Ekl et al. disclose all the subject matter of the claimed invention with the exception wherein signaling the unavailability of the bridge terminal is achieved by means of a power saving signal of the communication network. Shimizu from the same or similar fields of endeavor discloses a wireless communication system that controls access requests (*see abstract*) wherein a wireless terminal signals its unavailability by sending a power saving signal that comprises a MAC frame with a flagged power management bit of the Frame Control field (*see paragraphs 108-109 and figure 4*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use a MAC frame with a flagged power management bit as the power saving signal that signals the unavailability of the terminal as taught by Shimizu with the system that communicates with two sets of users at different periods as taught by Ekl et al. The power saving signal can be implemented by configuring a wireless terminal to send a MAC frame with a flagged power management bit as defined by the IEEE 802.11 specification to signal its unavailability. The motivation for using the power management bit to signal the unavailability of the wireless terminal is ease of implementation and improved compatibility because the power management bit is defined by the widely adopted IEEE 802.11 specification.

For claims 2, 6, and 10, Ekl et al. disclose a method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal, wherein the communication network is a packet transmission network in accordance with the IEEE 802.11 standard (*see column 1 lines 11-17*).

10. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekl et al. (U.S. Patent 6,816,502) and Shimizu (U.S. Patent Application Publication 2003/0125087) as applied to claims 1 and 5 and further in view of Fujii et al. (U.S. Patent Application Publication 2005/0157745).

For claims 3 and 7, Ekl et al. disclose a method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal, wherein the operation of the bridge terminal is switches periodically between the first and second subnets such that the bridge terminal is operated in each of the first and second subnets for a predetermined duration (*see abstract and figure 4*). Ekl et al. and Shimizu does not disclose the method wherein jitters in the predetermined duration are compensated over a plurality of switching cycles by controlling the switching. Fujii et al. from the same or similar fields of endeavor disclose a communication management system that allots transmission rights to communication stations carried out within predefined periods (*see abstract*) wherein the predefined periods are adjusted to compensate for jitter (*see paragraph 214*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a transmission rights period that is adjusted based upon jitter as taught by Fujii et al. with the method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal as taught by Ekl et al. and Shimizu. The transmission rights period that is adjusted based upon jitter as taught by Fujii et al. can be implemented by configuring the wireless terminal as taught by Ekl et al. to factor values of jitter for the channel when setting the timer values. The motivation for using the transmission rights period that is adjusted based upon jitter with the method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal is to

improve the efficiency of the system by preventing waste of the communication band that may occur when a transmission is completed before the period has expired.

11. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekl et al. (U.S. Patent 6,816,502) and Shimizu (U.S. Patent Application Publication 2003/0125087) as applied to claims 1 and 5 and further in view of admitted prior art.

For claims 4 and 8, Ekl et al. and Shimizu disclose a method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal. Ekl et al. and Shimizu does not disclose the method wherein a content of missed beacon signals is reported by the bridge terminal by means of a probe/probe signaling. However, the admitted prior art discloses a probe-P/response mechanism provided by the IEEE 802.11 standard in the case of a missed beacon (*see page 12 lines 2-10*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the probe-P/response mechanism as provided by the IEEE 802.11 standard with the method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal as taught by Ekl et al. and Shimizu. The probe-P/response mechanism can be implemented by ensuring that the method for connecting a first subnet and a second subnet of a communication network by means of a bridge terminal complies the IEEE 802.11 standard. The motivation for using the IEEE 802.11 standard and provided probe-P/response mechanism with the method of connecting a first subnet and a second subnet of a communication network by means of a bridge terminal is to ensure that the method is compatible with a wide range of wireless devices.

Response to Arguments

12. Claims 4 and 8 were previously rejected under 35 U.S.C. 112, second paragraph for being indefinite. The applicant's argument regarding the rejection has been fully considered and is persuasive. Therefore, the rejection has been withdrawn.

13. Claim 11 was previously rejected under 35 U.S.C. 101 because the claimed invention was directed to non-statutory subject matter. It is noted with appreciation that the applicant has overcome the rejection by amending the claim. Therefore, the rejection has been withdrawn.

14. Claims 1-11 were previously rejected under 35 U.S.C. 102(e) for being anticipated by prior art. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (*see form PTO-892*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit
2616

BL